# Physical Activity and the Media

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#### Outline of today's session:

- •The impact of screen time on physical activity and health
- •Research on physical activity and media
- •Tips to increase physical activity using the media
- •Techniques to help students interpret direct and indirect messages

What is physical activity?

# What is physical activity?

Is a process with fitness as the goal

Think of a continuum:
Sedentary is at one end and fit at
the other

# What is physical activity?

Physical activities are:

Lifestyle (gardening, shoveling snow, walking)

Sport (baseball, bowling)

Exercise (aerobics, jogging)

# How much physical activity?

Adults: 1 hour per day 30

30 min of MVPA

Adolescents: 1 hour per day

30 min of MVPA

Children: 1.5 hours per day

& up to several hours

30 min MVPA

no more than 1-2 hours sedentary

# Health and Physical Activity

Obesity and overweight Cardiovascular disease Diabetes Depression

Osteoporosis

## Health and Physical Activity

Osteoporosis

Healthy Bones are a combination of nutrition and physical activity

Activity must be weight-bearing Nutrition must include calcium

# What is typical physical activity for kids?

- 4.5 hours of TV or screen time
- 9 hours of sleep
- 8 hours of school (including transportation)
- 21.5 hours
- 2.5 hours to eat, dress, play, do homework
- 24 hour day

## Media

Focus on TV
Shows and advertisements
A bit of print media

## What, How and How Much?

"Children whose families have access to both broadcast television and cable can choose from 25 different stations programming 1190 shows specifically designed for children."

As of May 2003, 71,897,250 households in the United States had basic cable. This represents 67.4% of all U.S. households.(A.C. Nielsen Media Research May, 2003)

There were an additional 22.31 million households that subscribed to a non-cable multi-channel viewing service (satellite, for example).(National Cable & Telecommunications Association March, 2003)

Cable companies had \$14.7 billion in advertising revenue in 2003 (Kagan World Media, a PRIMEDIA Company 2002)

#### **Kids' shows on CBC (Canada)**

- •90% of children's show producers competing for air time present the <u>merchandising plan first</u>, according to Adrian Mills, head of CBC children's programming. CBC programs come before the spinoff merchandise.
- •In 1998, 51 toy lines connected to TV shows were launched worldwide, contributing to the \$22 billion toy licensing business. Source: ACNielsen Media Research and the Toronto Star, March 17, 1999.

#### The State of Children's Television (U.S.)

- •Programs targeted to the five-to-eleven-year-old set were more likely to contain violence and harsh language and less likely to contain any enriching content than programs for the preschool or teen audience.
- •Only 25% of programs containing "a lot of violence" (intentional and malicious acts of violence in three or more scenes) carried the "FV" (fantasy violence) warning.

Source: 1998 State of Children's Television Report, Annenberg Public Policy Center, University of Pennsylvania.

#### Attitudes Towards Children's TV Programming in the U.S.

•The two most frequently cited reasons for the lack of quality in children's broadcast programming are violence (43%) and insufficient educational programming (25%).

Source: 1995 Poll on Children's Television, Center for Media Education

#### **U.S. Children's Comments in TV Programming**

- •66% of American children say they think their peers are influenced by what they see on TV, and 65% say shows like *The Simpsons* and *Married With Children* encourage kids to disrespect their parents.
- •Although 73% of kids think television is mostly entertainment, 82% say television shows should help teach kids right from wrong.
- •What young people see on television makes them think people are mostly dishonest (49%); care more about money than about people (54%); are selfish (46%); and talk back to their parents (51%).

Source: Sending Signals: Kids Speak Out about Values in the Media, A Children Now Poll, conducted by Fairbank, Maslin Maullin & Associates, 1995 "Non-programming" (commercials, PSAs, spots for other television programs) accounts for 25% of all screen time.

#### Breakdown of "non-programming"

- 66% Advertisements for services and products
- 32% Promotions for other television shows
- 1% Public Service Announcements

## Violence

Studies on the impact of violent images on children's behavior are well-documented.

**Remember "Bobo":** In 1961, Albert Bandura and associates conducted a study in which children watched an adult model play in a room full of toys. Some children watched the adult act violently towards a toy dubbed "Bobo", these children sought out that specific toy when brought into the room full of toys, and imitated the physical violence and language of the adult.

**Implications for Future Research**: Theories of modeling and aggression



Brainy Brainy is weird. You might even call him creepy. It's not that Brainy is mean, or evil, or anything like that, he just kind of has these...POWERS. He shows up--almost MAGICALLY--and it's usually around Helga. Sometimes it seems like Brainy exists only to get in Helga's way. Just when it looks like Helga may finally have a moment alone, there's Brainy, breathing and wheezing down her neck. For a guy who doesn't seem to feel pain, he sure is one.

http://www.nick.com/all\_nick/tv\_shows/characters.jhtml?propertyId=665&characterId=10000278

# Scholarship

Children are not often depicted in scholarly roles in the media (television, print media). When scholarly characters do appear, they are often portrayed in a less than favorable way.

In a study of 5,041 commercials, analysts coded "roles" (athletics, eating and drinking, scholastic activities, etc.) and favorability.

- Most common "roles": Eating and drinking, Visiting with friends, Athletic activities, and Personal care.
- Most common **positive** portrayals: Athletic activity, Eating and drinking, and Exercise.
- Scholarly depictions were very rare, and overwhelmingly negative.

Peterson, R. T. (1998). The portrayal of children's activities in television commercials: A content analysis. *Journal of Business Ethics, 17,* 1541-1549

## Food in television

- "They should take (advertised) medicines and vitamins, drink Coke, and eat fast foods."
- -Response by an unnamed child when asked what people should do to maintain good health (appeared in Byrd-Bredbenner, 2000)

Byrd-Bredbenner, C., & Grasso, D. (2000). Health, medicine, and food messages in television commercials during 1992 and 1998. *Journal of School Health*, 70(2), 61-65.

- •Direct correlation between advertised products and children's requests and preferences indicates that unbalanced nutrition (and health in general) information being offered on television does influence eating patterns
- •A "socializing influence" equal to that of television (family, school, religion, etc.) must be employed to teach children how to be critical consumers of media.

Byrd-Bredbenner, C., & Grasso, D. (1999). Prime-time health: An analysis of health content in television commercials broadcast during programs viewed heavily by children. *The International Electronic Journal of Health Education, 2*(4), 159-169.

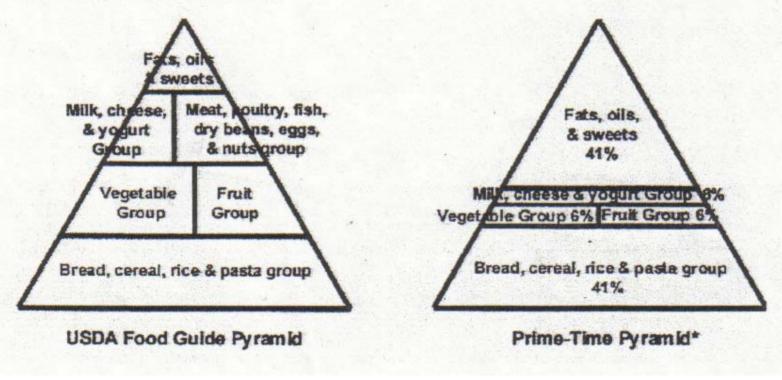
## Food in television

- The foods least advertised on TV (milk, fruits and vegetables), were also those in which American children were most deficient, indicating a potential link between media exposure and nutrient preference.
- The most commonly advertised foods (sweetened cereals, sweets, desserts, low-nutrient beverages (soft drinks), and salty snack foods) are also the most frequently requested by children.

Johnson, R. K. (2000). Changing eating and physical activity patterns of U.S. children. *Proceedings of the Nutrition Society*, *59*, 295-301.

#### Food Advertising: Composition of the Ads

Figure 9. Comparison of USDA Food Guide Pyramid and pyramid of foods advertised on children's prime time TV. (Source: Byrd-Bredbenner, 1999)



# Are children eating according to the Food Guide Pyramid recommendations

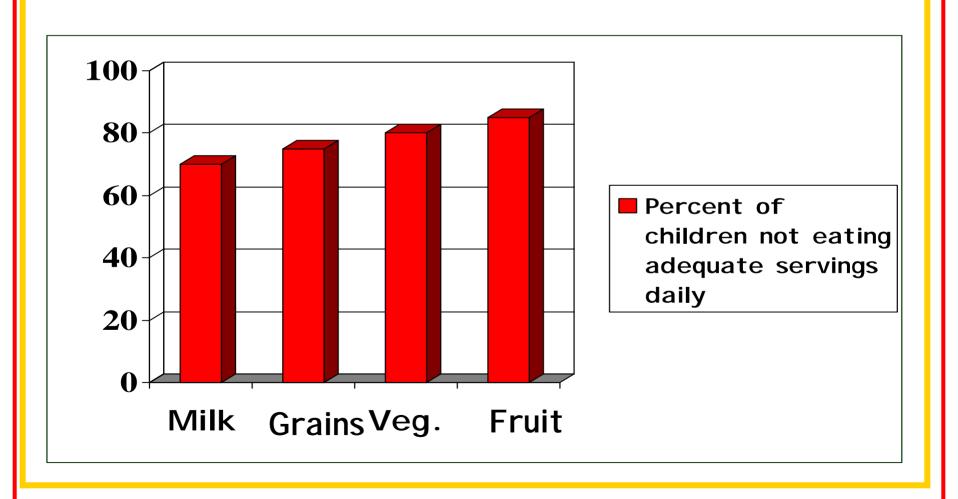
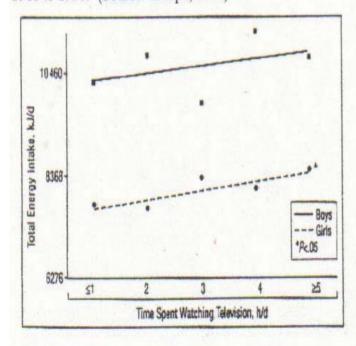
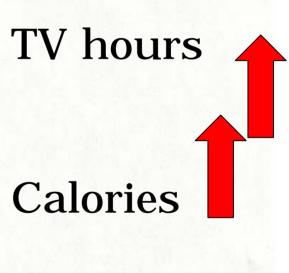


Figure 10. Total energy intake and daily hours of television watching among US children aged 8 to 16 years, 1988 to 1994. (Source: Crespo, 2001)





Case Study"Earn TV" system

Pedal 60 minutes to earn 60 minutes of television time Time earned could be used anytime following completion of the ride.

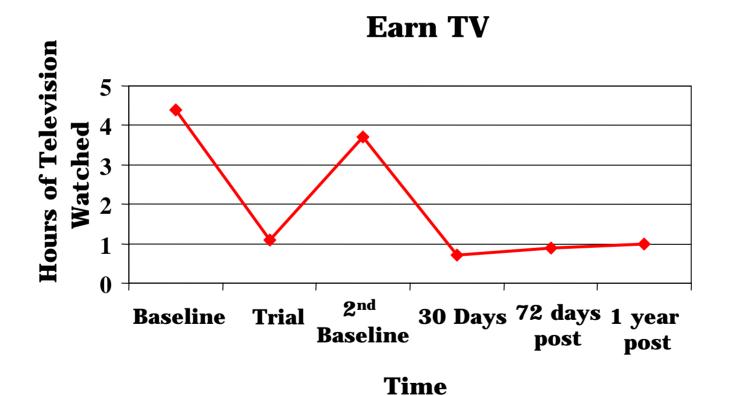
Baseline 4.4 hours of TV daily

Earn-TV trial week 1.1 hours

Second baseline (2 weeks) 3.7 hours

Earn-TV 30 days 0.7 hours

72 days post-intervention: 0.9 hours



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72 days post-intervention: 0.9 hours

#### Child had lost 20 lbs

Follow-Up One Year Later: 1 hour of television per day

#### Weight loss maintained

"...more extended interventions are needed to allow children to begin creating alternative sources of reinforcement that compete with television viewing."

Jason. L. & Brackshaw, E. (1999). Access to TV contingent on physical acitivity: Effects on reducing TVC-viewing and body weight. *Journal of Behvaior Therapy and Experimental Psychology*, 30, 145-151

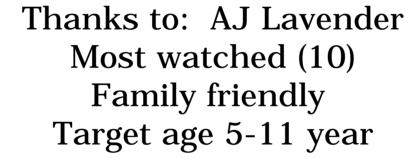
























### Advertisements

3-4 ads for other shows in a 30 minute animated children's show

No Public Service Announcements (e.g., VERB)





### Advertisements

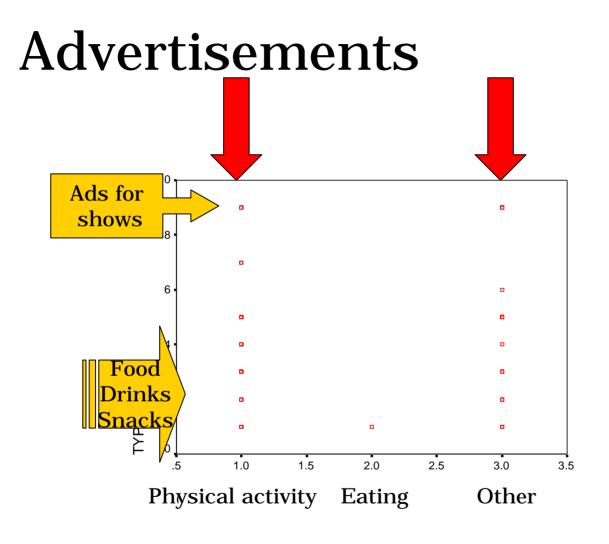
F	amily show	<b>Kids Show</b>
Food	18.5	18.6
Beverage	3.6	8.6
Snack	7.1	12.9
Toy		7.1
Adult product	50	30
Show	10.7	18.6

Is it possible that a goal of tv is for children to watch more tv?

#### Advertisements

- 35.5% of ads in children's shows used a physical activity
- 10.7% of ads in family shows used physical activity
- 7.2% of ads showed eating in family shows
- 1.4% of ads showed eating in children's shows (40+% were food)

No clear relationship between product type and physical activity can be observed.



Children's shows

### **Shows**

- 8 hours of shows (Saturday, Sunday and weekday primetime)
- 11 animated shows directed at children(SpongeBob)
  - 2 family shows (7<sup>th</sup> Heaven)
  - 1 adult show (Friends)
- 42% no physical activity portrayed 68% were positive portrayals
- During primetime, only 1 portrayal of physical activity (walking)
- Also the only non-animated portrayal

## **Show Content**

Television is sedentary Primetime television shows present NO direct physical activity messages to children

Does the lack of activity send an indirect message?









Thanks to:

Sarah Feltman

**Kathy Taylor** 

Susan Rutz







Undergraduate students in Health and Human Performance

# Techniques to help students interpret direct messages (ads)

"Teachers have the ability to engage students in media literacy — the ability to access, evaluate, analyze and produce both electronic and print media — by dissecting pop culture and advertisements. Media literacy education can help students build critical thinking and analytic skills, become more discriminating in the use of mass media, distinguish between reality and fantasy and consider whether media values are their values."

#### Bloom's Taxonomy

Knowledge Comprehension **Application Analysis Synthesis Evaluate** 

List, name, identify Give an example Use, calculate Test, examine Create, construct Judge, predict

What? Think of **Demonstrate** Decide Make Why?





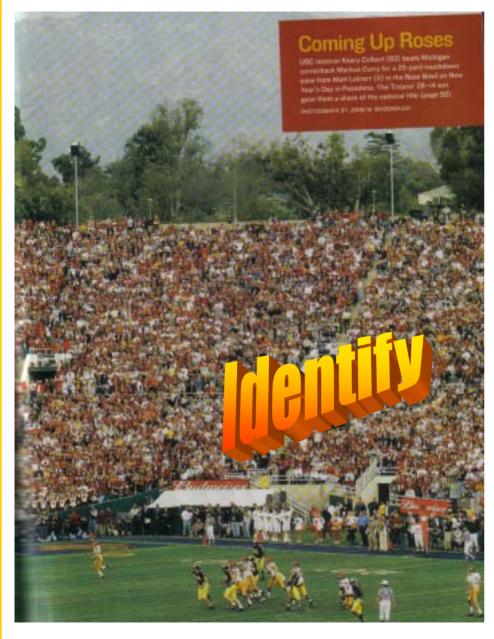


Know



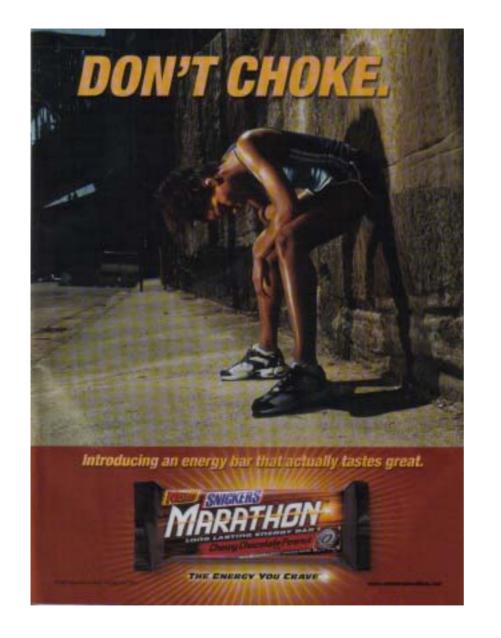


Apply & analyze Create & evaluate



RoseBow1 USC versus Michigan What advertisement can you see?

Sports Illustrated January 2004



From Sports Illustrated..

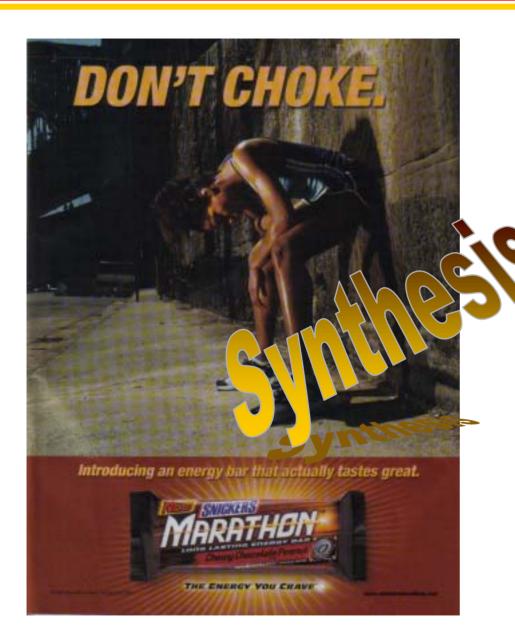
List what you see in the Ad...

What it is does the athere play?

What makes the productive?

What should we be concerned about?

Are we correct in our concern?

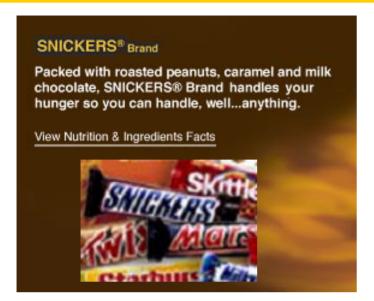




#### **CHEWY CHOCOLATE PEANUT**

Serving Size: 1 bar 55g Calories 220 Calories from Fat 60

	% Daily Value	
Total Fat	7g	11%
Saturated Fat	1.5g	8%
Cholesterol	5mg	2%
Sodium	240mg	10%
Potassium	190mg	5%
Total Carbohydrate	27g	9%
Dietary Fiber	2g	8%
Sugars	18g	
Protein	13g	25%
Vitamin A	35%	
Calcium	45%	
Riboflavin	100%	
Vitamin B6	100%	
Vitamin B12	100%	
Magnesium	35%	
Phosp horus Phosp horus	25%	
Iron	35%	
Vitamin C	100%	
Vitamin E	100%	
Niacin	100%	
Folic Acid	100%	
Pantothenic Acid	100%	
Thiamin	100%	
Zinc	35%	
Biotin	100%	





MILK CHOCOLATE (SUGAR, COCOA BUTTER, CHOCOLATE, LACTOSE, SKIM MILK, MILKFAT, SOY LECITHIN, ARTIFICIAL FLAVORI, PEANUTS, CORN SYRUP, SUGAR, SKIM MILK, BUTTER, MILKFAT, PARTIALLY HYDROGENATED SOYBEAN OIL, LACTOSE, SALT, EGG WHITES, ARTIFICIAL FLAVOR.

#### NUTRITION

Sugars 30 g

Protein 4 a

NET WT 2.07 OZ (58.7 g)

 Serving Size 1 package
 Calories from Fat 130

 Amount/serving
 %DV\*

 Total Fat 14 g
 22%

 Sat. Fat 5 g
 25%

 Cholest. 5 mg
 2%

 Sodium 140 mg
 6%

 Total Carb.35 g
 12%

 Dietary Fiber 1 g
 4%

Calories 280

Vitamin A 0% - Vitamin C 0% - Calcium 4% - Iron 2% 
\* Percent Daily Values (DV) are based on a 2,000 calorie diet.



#### **CHEWY CHOCOLATE PEANUT**

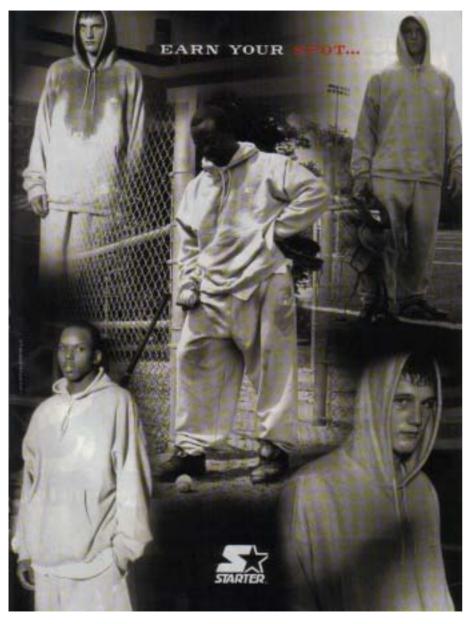
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Sugars	18g	
Protein	13g	25%
	35%	
	45%	
	100%	
	100%	
Vitamin B12	100%	
Magnesium	35%	
The second secon	25%	
	35%	
	100%	
Vitamin E	100%	
	100%	
	100%	
	100%	
	100%	
Zinc	35%	
Biotin	100%	



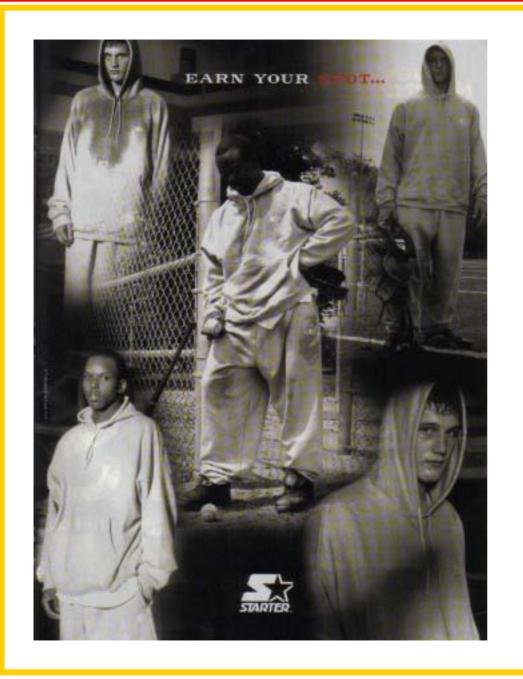


http://pbskids.org/dontbuyit/teachersguide.html



Consider the product in this ad.

Are these models or real people? What activities are these men doing? How much do these young men look like us? Are these clothes cool? Are these clothes more or less expensive? Would we be more or less popular wearing these clothes?



Is the ad using sport sport to make the activity "cooler"?

Will we be better at sport if we wear these clothes?

What is the most important thing to help us be good at sport?



## Be The ad detective!







# Techniques for helping children interpret indirect messages



Understanding factors underlying experts, health

#### Bloom's Taxonomy

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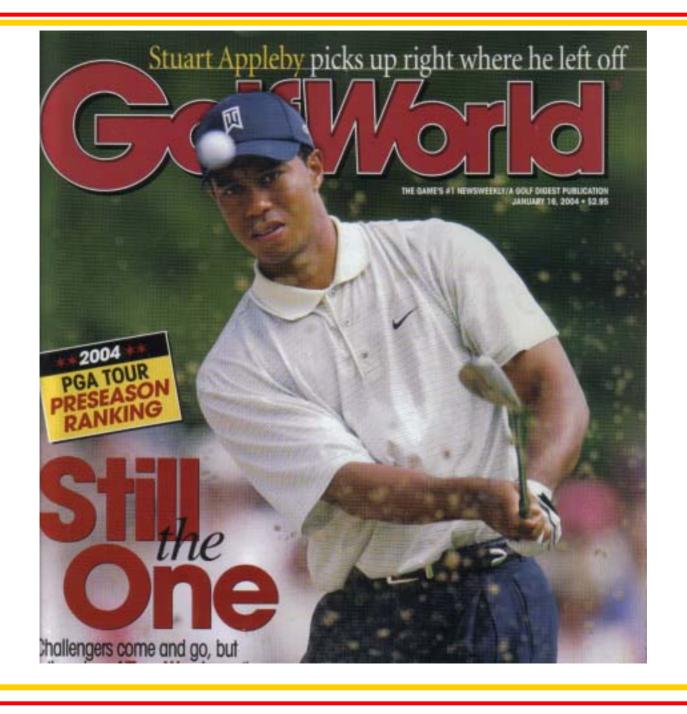


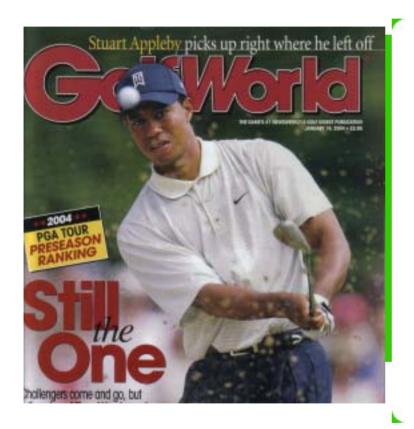
Know



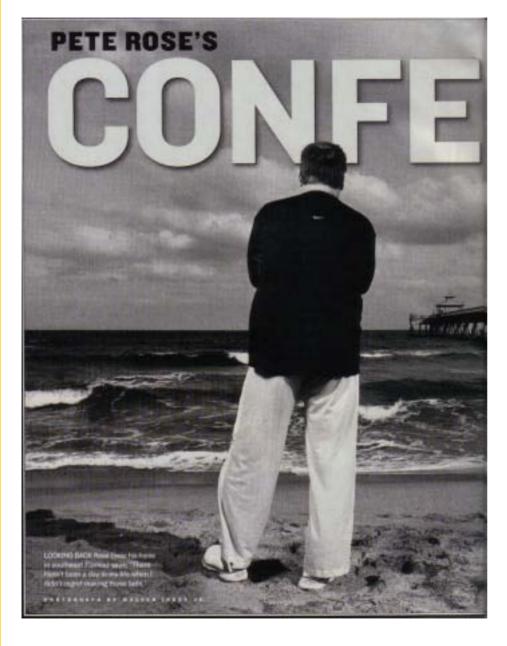


Apply & analyze Create & evaluate





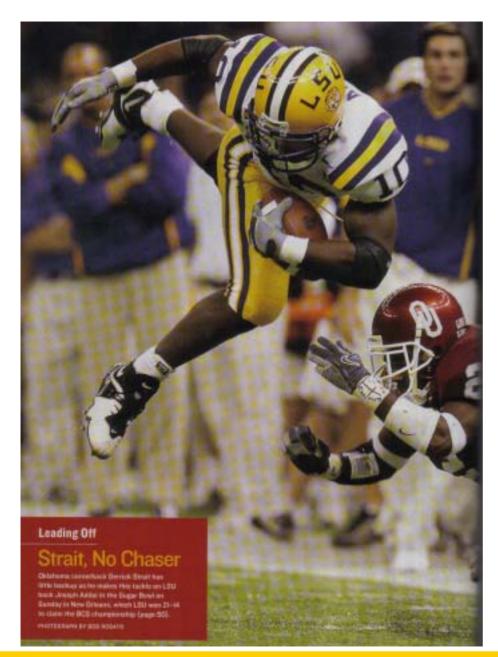




January 12, 2004 Sports Illustrated Page 72

What advertisement can you see?

Is all press good press?



January 12, 2004 Sports Illustrated (page 14)

Sugar Bowl LSU versus Oklahoma

What endorsement can you see?





ow much is TV like real life? Take this quiz and find out.

**Q.** How many times per year does an average police officer shoot a gun in the line of duty?

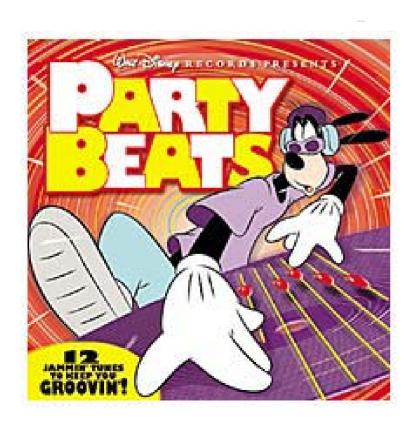
Once a year.

Once a month.

Once a week.

None of the above.

Includes:
Basketball
Dig the Dance
Extreme Team Sport Machine...



# Understanding factors underlying experts, health

#### **Athletes:**

practice, practice, practice

#### Health:

physical activity nutrition limited sitting



There are
360,000
NCAA
studentathletes and
we're all
training to
perform in
whatever we
go on to do.

### Learn to Play

#### **Practice Makes Perfect**



It takes a lot of practice to become a great basketball player. Here are some drills and exercises that will help get there. You can even collect J. Jumps ctice Points. (You'll you completed

#### rcises

Defensive Slide Drill - Earn 10 Practice Points!

Defensive Slide Drill - Earn 10 Practice Points!

Dribbling for Five Minutes - Earn 12 Practice

Points!

Opposite Hand Layups - Earn 15 Practice Points!

<u>Pass & Go Circle - Earn 15 Practice Points!</u> <u>Rebounding Tip Drill - Earn 10 Practice Points!</u>

# Understanding what the company wants you to think

What does physical activity (or athletic, healthy, fit) mean to you?

Who decides whether you are fit?
What chances do you have to be active?
Do you have to be an athlete to be healthy?
Popular?



### SpongeBob

What did Gary think of activity? What did SpongeBob do? Why did SpongeBob train Gary?

Is this the way you think about Activity?

Is this a good reason to do activity?

## question The Commercial

### When a commercial comes on, ask yourself these questions.

- •What sound effects or music does the commercial use? Do the sounds make it more exciting?
- •How do the actors using the product look? Do you think the product could make you happy or popular?
- •Are there celebrities in the commercial? Do you think the celebrity really uses the product?
- •When watching a toy commercial, is the toy pictured in a group with other toys that are all sold separately?

### **Questions to Ask After You Buy**

- •Does the product look bigger or better on TV than in real life?
- •Does it work the same at home as it did on the commercial?



## How could we develop this into a lesson?

#### **Objectives:**

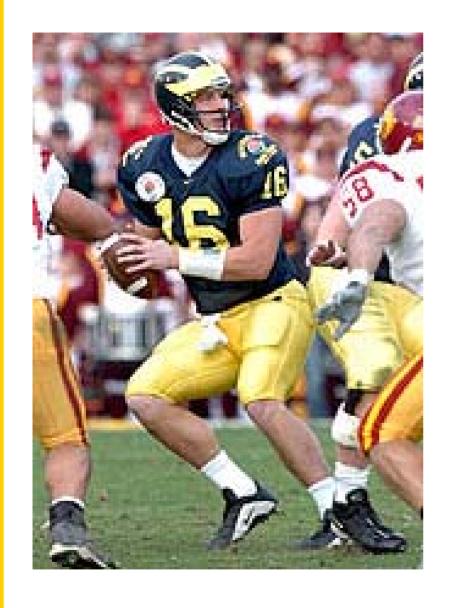
Understand the goal of the company Identify the "advertisement" State why the product is attractive Suggest reasons not to buy the product

#### Nike

Effective advertising campaign "Just Do It"
Source of controversy (worker related)
College protests
Professional athlete protests
Profession and college endorsements

The Just Don't Do It Campaign began small; a group of U. of Michigan students and faculty who were concerned with the University's association with the swoosh. The reasoning behind the campaign was straightforward. Michigan is recognized as one of the premier institutions in the world - the academic and athletic achievements of its faculty and students are recognized worldwide. In the face of this recognized standard of excellence, the contract with Nike appeared overwhelmingly hypocritical.

http://www-personal.umich.edu/~lormand/poli/nike/nike101-1.htm



RoseBowl
USC versus Michigan
What
advertisement can
you see?





One of the key factors in the breakdown of negotiations, the "living wage" requirement and WRC membership, can be traced to political pressure applied by the anti-sweatshop movement. The University group most actively involved in this cause is Students Organizing for Labor and Economic Equality (SOLE). SOLE has engaged in various protests over the course of the last year, attempting to force the University to sign the WRC and opposing the encroachment of "Big Coffee" in Ann Arbor. They were finally successful. After seizing LSA Dean Shirley Neuman's office and occupying it for about half a week, President Bollinger agreed to sign the WRC statement. http://www.umich.edu/~mrev/archives/2000/09-27-00/nike.html

#### Two lessons

One for older children: Nike and the Transnational Campaign

One for younger children: Identifying the product Stating that companies pay athletes

"Television is a compelling medium. When showing program or commercial clips to students, keep the segments very short — one or two minutes — so that students stay with the task at hand. Tell students that they will be seeing only short clips, and play with the media to keep attention from wandering. To concentrate on images, turn off the sound. To concentrate on sound, put a towel over the screen. Use the "pause" button on the remote and the "closed-captioning" function.

If students protest that they aren't getting to see "everything," remind them that the people who create TV have designed programs so that viewers feel compelled to watch everything. Who's in control? The students or the people who are making the programs?"

- 1997 Reggie White, star of World-champion Green Bay Packers, denounces Nike for use of sweatshop labor + lack of shoe jobs in the U.S.
- 1997 Transnational Research Action Center releases report compiled by Dara O'Rourke who just returned from Vietnam after a seven-month consultancy with the United Nations Industrial Development Organization -- DO was given an internal Nike study which showed serious health and safety problems
- 1997 Nike official complains about increase in Indonesian minimum wage (up 20 cents per worker per day)
- 1997 G-X "corporate responsibility" organizer helps Eleanor Smeal and a NOW representative to conduct press conference announcing women's groups' criticism of Nike's "women's empowerment" marketing campaign + sweatshop conditions
- 1997 Sports columnists around the U.S. begin to link Nike's big endorsement deals to sweatshop labor -- same with student protestors at UIIL, FL St., UNC, Penn St., Cal, U/MI, Colorado, etc.
- 1996 Chris Webber, Washington Wizards (nee Bullets) forward refuses to approve \$ 150 signature sneaker for Nike -- complains that poor kids are targets and shoes only cost five bucks to make
- 1995 The International NGO Forum on Indonesian Development (Jakarta & The Hague) begins a series of discussions on worker rights with the New York-based Council on Foreign Relations -- Nike is characterized as "worst" U.S.-based multinational operating in Indonesia as far as labor practices are concerned